DOCUMENT RESUME

ED 272 287 PS 015 918

AUTHOR Spidell, R. Anne
TITLE Teacher Intervention and Beliefs in Preschool Children's Play.
PUB DATE Apr 86
NOTE 47p.; Paper presented at the Annual Meeting of the American Educational Research Association (67th, San Francisco, CA, April 16-20, 1986).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS Educational Sociology; *Intervention; *Play; *Preschool Children; *Preschool Curriculum; Preschool Education; *Preschool Teachers; *Teacher Behavior
IDENTIFIERS Weber (Max)

ABSTRACT

The purpose of this study was to describe preschool teachers' interventions during children's free play. A Weberian sociological framework was used to examine (1) what happens when teachers intervene into children's play, (2) teachers' beliefs and thus their decisions about play, and (3) the relationship between these issues. Three preschool teachers were video filmed during free play and later interviewed about observed intervention episodes. The teachers were prompted to talk about what happened during the event, what they were thinking about, and for what reason they intervened. Findings indicated that the intervention episode could be broken into three identifiable segments: antecedent, tactic, and consequence. The antecedents were categorized into one of four categories: breach of discipline, social isolation, child request, and reactive observation. The tactics were categorized as conversation participation, demonstration, environmental modification, praise, redirection, maintenance, and instruction. The consequences were noted as either changing play, not changing play, or undetermined. Teachers held differing beliefs and their actions were related to their belief systems. Teachers based their decisions upon their personal system of educational principles concerning how teachers should teach, how children learn, and the early childhood curriculum. Reasons for intervention fell into one of the three Weberian constructs: cultural influences, social-political influences, and economic influences. (Author/RH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY
R. Anne Spidell
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

ED272287

PS 015918

TEACHER INTERVENTION AND BELIEFS IN PRESCHOOL CHILDREN'S PLAY

R. Anne Spidell, Ph.D.
Texas Christian University

THEORETICAL FRAMEWORK

The purpose of this study was (1) to understand what happens when teachers intervene into children's play, (2) to identify teachers' beliefs related to their decisions about play, and (3) to analyze the relationship between these issues.

A unique aspect of preschool and kindergarten is the significance of play in its curriculum. While play is not the dominant feature of childhood, it is a leading factor in development. Play training studies have been conducted with reasonable success in trying to enhance children's imaginative and sociodramatic play. These studies have enhanced affective, cognitive, and social gains as well as improved creativity and IQ scores (Dansky, 1980; Saltz et al. 1977; & Feitleson & Ross, 1973). Play training methods have also improved peer interaction, group problem solving, decreased aggression and hyperactive behaviors (Rosen, 1974; Freyberg, 1973). Furthermore, language skills, verbal fluency, comprehension, and recall have all shown improvement as a result of play training (Dansky, 1980; Lovinger, 1974; Freyberg, 1973). Thus the availablity of play periods, activities, and materials appears as an important feature for early childhood curriculum. In order to better understand children's development and what goes on in the classroom, a closer look at the significance of play in the curriculum seems important for future research.

* Paper presented to the American Educational Research Association, San Francisco, California, April, 1986.

BEST COPY AVAILABLE

Assuming that two levels of play exists, one merely keeping children occupied and the other contributing to educational development, Sylva, Roy, and Painter (1980) suggested that questions concerned with the potential for challenging and more complex play cannot be gained by looking at what actually occurs in the preschool but by looking at the role of the adult in the instances when they are there. Smilansky (1968), Tizard et al. (1976), and Smith and Syddall (1978) specifically investigated children's play behaviors and adult intervention. While intervention is a key factor in the research, little further investigation is given to the process of the act. Such investigation into how classroom teachers interact into children's play, what actual methods they use to stimulate play, and which methods seem to work best and with which children are needed for the purposes of better understanding what goes on in the classroom and how to better help children develop to their fullest social and intellectual potential.

Teacher decision making takes form in many ways. King (1978) looked at teacher ideologies or beliefs in British Infant Schools using a Weberian analysis and noted the importance of a teacher's belief system in their definition as to what was real in the classroom. The teachers' beliefs about their students and their beliefs about work and play were the characteristics found most apt to reveal the teacher's philosophies.

In the King (1978) study, three factors stand out as being determinant of the sociological makeup of the classroom in the British Infant Schools. The first was that all of the teachers as well as each school had an ideology. The ideologies were not labeled

romantic, traditional, or progressive, rather as child centered, class centered, or school centered. The second sociological factor had to do with socioeconomic equilibrium. Equilibrium existed when the teachers' and students' socioeconomic backgrounds matched. If disequilibrium existed, the difference was blamed on the lack of parental supervision and/or care. The third sociological factor was the teachers' beliefs and provisions in the environment for the curriculum areas of work and play. Thus, to summarize the situation, three descriptive sociological factors exist: socioeconomic status, teacher ideology, and the provisions for work and play. King's theoretical basis for analysis came from the sociological framework of Max Weber.

In Weber's (1922/1947) sociological analysis, it is not considered difficult to assess an individual's motives; however, it is difficult analyzing the behavior of the system of action as a whole rather than the behavior of one situation and one individual. This system analysis becomes possible only through generalized conceptual schemes (Weber, 1922/1947). Weber believed that "only through relating the problem of the dynamics of the whole to the motives of the individual could he achieve a genuinely scientific level of explanation" (Weber, 1922/1947, p. 25). Weberian theory considers ideology and beliefs as a valuable factor within the order of the system through his analysis of meaning of action. In the literature on the analysis of schools, ideology has been examined as a factor influencing the decisions of teachers. The meaning teachers place on their decisions about their students and the environment reveals their ideology about the aim of education and its goals. Weber viewed the social structure through three resources: economic interests, social-

political structures, and cultural resources. Economic interests are a means for interpreting the group organization, intergroup conflict, and historical charge. Social-political resources characterize the bureaucratic structure of the social system (classroom) such as authority and the control of power. The third resource area is cultural resource which analyzes the class, party, and feelings of affinity. These interests seem to be one method for looking at the macro level of the classroom. A more detailed review of Weberian constructs and their implication for the classroom may be found in Spidell (1985).

Much research has been done of play. But, it has mostly been from an individual and developmental standpoint. Effective means exist for assessing play among children (Rubin et al. 1976; Rubin, 1977) not only socially but cognitively as well. Researchers have also found that adults can increase the complexity of play by intervening. Unfortunatly, very little research exists concerning teacher intervention in children's play.

PROCEDURE

Data were gathered for this study by observing in three preschool classrooms during free play. The children in the classrooms were three-and-four year olds, the ages at which dramatic play predominates. Classes were selected that included in their curriculum a scheduled block of time for free play, that is self-selected and self-directed play, in their daily schedule. The physical setting included provisions for play such as sociodramatic play, fantasy play, table activities, books, and puzzles. All three nursery schools were from middle socio-economic areas. The community was one of a twin

city urban area with a combined population of approximately 100,000. A large midwestern university was located in the community and many of the preschool children's parents were involved with the university, either as students, faculty, or staff. In this study, the teachers' names will be referred to as Janet, Kim, and Sue. Kim and Janet's program was for half days and Sue's program was all day. Kim and Janet taught in the same nursery school and were both head teachers of their classrooms with each having an assistant teacher. During the period of observation, Kim's class enrolled 15 students, Janet's class 15 students, and Sue's class enrolled had six students.

The subjects selected were teachers with five years teaching experience. Kim's educational background included a B.A. degree in developmental psychology, Janet's educational background included a B.S. degree in early childhood education, and Sue's educational background included a B.S. degree in elementary education. All three teachers were working on their M.Ed. degrees; Kim and Janet in early childhood and Sue in elementary education. Because the teachers were the primary focus of the study, careful consideration was given to whether or not the teachers regularly intervened in children's play. Prior to data collection, the teachers were observed for a period of one hour. If intervention was not observed at least approximately once every four minutes on average during the first observation, a second observation was made to observe the teacher. If on the second observation fewer than four interventions per minute had been observed, another sample classroom was to be drawn from the population. In the pilot study, intervention occurred approximately once every two minutes.

The teachers were informed of the research and consented to

allow video equipment to be used to record teacher-child interactions. The teachers were also willing to devote time on the days of the video taping to watch episodes of that day's teacher interventions and reflect upon the events. The subject's confidentiality has been respected in that fictitous names have been used and the tapes were only viewed by the researcher.

Instruments

Event samples were recorded through video taping during free play. Each of the three teachers were the focus of observation during the free play sessions. The observer was a non-participant observer during the taping. In order to collect the event sample, the recorder followed one teacher for the entire play period and taped her activities. This was done on six occasions for Janet, five occasions for Sue, and five occasions for Kim over a period of about six weeks. Observations were made on different days of the week for each teacher.

After the taping, the researcher reviewed the tape and isolated intervention episodes. Tapes were viewed and teacher's interventions identified if a teacher was observed acting in some way to change play. The interventions were both verbal and non verbal. The interactive episode was considered an intervention (1) if the teacher directly spoke to the child or the group, (2) if the teacher participated in the play situation as a player, or (3) if the teacher non-verbally intruded into the situation.

The antecedent was determined by the context of the event. Possible identifiers for the preintervention episodes were the teacher coming to the group, looking at the students, or an observation period the teacher made prior to the intervention. The post intervention or

consequence segment was determined by the children's immediate response to intervention as well as the teacher's response. Possible identifiers were a verbal response from the child/group addressed, whether a change in play sophistication occurred, or whether there was a follow through to the teacher's input. One consequence of intervention was no response. If there is no identifiable response, then this intervention episode was continued for about 30 seconds after the intervention. One of the purposes of the taping was to aid the teacher's recall of what happened during the play period. Thus, if the teacher asked for the researcher to replay or show more of the intervention, its antecedents, and consequences, then that request was honored.

After the researcher identified the interventions, an interview was held with the teacher in which tape segments were used to stimulate recall. An audio tape recorder was used to record the session. The teacher was asked to view the episodes and reflect upon what was going on during the episode and what she was thinking about in relation to the intervention and the situation which led to the teacher intervention. The open ended questions were used to offer the teacher the opportunity to spontaneously and naturally reflect upon the class and the play interactions. The researcher also probed statements made by the teacher using prompts to ensure the most comprehensive reflection of the social interactions during free play.

Audio Tape Transcription and Analysis

The raw data for analysis consisted of the intervention episodes on film and the transcribed interview. The film episodes were analyzed based upon three catagories: antecedent, intervention, and consequence. The antecedent or activity just prior to the teacher's

input was described; then, the intervention tactic itself was described and thirdly, the activity following the teacher's input or the consequence was described. This was done to allow the researcher to have a full picture of the process. The categories of antecedent, tactic, and consequence were validated by early childhood educators who viewed the film and used the categories to label the segments. The interjudge agreement was assessed at 93%.

The interview was analyzed by looking at the teacher's belief statements and secondly by looking at the relationship between the intervention episode and the reason for intervention. After the interview had been transcribed, the researcher reviewed teacher statements in the interview made concerning their beliefs about the child, the curriculum, the school, and identified belief statements. The categories of beliefs were generated statements relating to the teacher's thoughts and reasons for making decisions.

The second phase of analyzing the transcribed interview consisted of looking at the reasons for intervention along with the episode segments of antecedents, interventions, and consequences. Interpretation of the relationships were made by several possible means. Identifying themes based upon the Weberian constructs as used in the King study were one method of determining reoccurring patterns. Provisions were made for other means of interpretation not known until after the data was collected and examined.

Ommissions were noted from the data such as the lack of sex differences and socio-economic differences mentioned by the teachers about play. These ommissions could have been pulled from the interviews if prompts directed toward those differences were used. It

is suggested that in order to attain this information in the future, special prompts be added to the repertoire which would target comments about sex differences and socio-economic differences.

RESULTS

The structure of each intervention episode was analyzed according to antecedent, intervention, and consequence. The various events were categorized based upon key elements in the events. Since preschool classrooms are composed of complex events, the antecedents, interventions, and consequences are not mutually exclusive. Rather, categories overlapped so that a single event might be placed in more than one category.

Intervention Episodes

Antecedents

The antecedents of the three teachers' play interventions seemed to fall within four classifications: (1) breech of discipline, (2) social isolation, (3) child request, (4) reactive observation. Breech of discipline as an antecedent, had to do with the child's possible harm to self, misuse of materials, and/or violation of rules. Social isolation was seen by the teachers as indicating a social risk. Children who were unoccupied, who were onlookers, or who were engaged in solitary or parallel play were all defined as isolated and became targets of intervention. The highest number of observed events had antecedents which fit in this category. Child Request was another category of antecedents. Children often sought help, conversation, reinforcement, or physical contact by initiating intervention. In these situations, once the intervention met the child's immediate need, the intervention stopped. Reactive observations took place as the teachers observed the ongoing activities and then intervened in

order to enrich the play. While breech of discipline and social isolation were seen as problematic antecedents, this category was not rooted in classroom problems. Rather, the teacher observed the activity and then intervened in order to enrich the play.

Intervention Tactics

The observed tactics fell into eight broad categories. Instruction was instructing or lecturing to teach a fact or concept. Conversation was a two-way discourse between teacher and child concerned mainly with inquiring about the child's well being, interests, or activities. Maintenance was the teacher's concern of keeping the free play period running smoothly. It consisted mainly of housekeeping interventions, such as getting more paint, taking a child's painting off an easel, and handing a child a toy which was out of reach. Praise was reinforcing a desired behavior or product. Redirection was suggesting an alternative activity or behavior that would move the child away from the present situation. Environmental modification was manipulating the environment, either by adding materials or redesigning centers. Managing space, moving children around, adding to limited materials, and resolving disputes about rules are examples of this tactic. Participation was the teacher's involvement in the ongoing activity, such as joining the play as a visiting neighbor at the home living center. Demonstration was exhibiting proper procedure to the child.

The frequency and use of these intervention tactics were tabulated for each teacher and then totaled for all. In looking at tables 1, 2, and 3, each teacher appeared to have a preference for tactics most often used. Kim used demonstration (27.6%) and

conversation (21.3%) more than the other intervention tactics with the least used tactics being praise (4.2%) and maintenance (2.1%) (see Table 1). Janet used instruction (25.4%) and redirection (22.2%) more than the other tactics with the least used tactics being praise (3.2%) and maintenance (1.6%) (see Table 2). Sue predominantly used the tactics of maintenance (32.6%) and environment modification (19.6%) more than the other tactics with the least used tactics being praise (4.3%) and participation (0%) (see Table 3). Redirection was the only tactic used frequently by all three teachers, but no ones' favorite. Overall, redirection (18.6%) and instruction (17.3%) were the most frequently used tactics while participation (7.7%) and praise (3.8%) were the least used (see Table 4).

Interventions in all three classrooms were complex, often combining several tactics together. One of the most frequent types of interventions included maintenance with redirection. For example,

> Janet was seated by the door greeting the children arriving at the preschool. Sarah, a student, was standing close by having just finished painting a picture at the easel. The teacher looked at Sarah and told her that she did not need a paint smock to work with the shapes. Janet took Sarah's picture from the easel and put it away to dry while Sarah removed her paint smock (maintenance). Janet and Sarah then walked over to the table with two different shape activities and Janet explained them to Sarah (redirection).

Not only did each teacher seem to have preferences for specific tactics, but each teacher appeared to also have preferences for particular combinations of tactics. Kim, for example, primarily used the tactic of redirection in combination with other tactics more than others. Janet used redirection and instruction as her predominant combination tactics more than others and Sue used maintenance in combination with more tactics than other intervention tactics.

In looking at the individual teacher's combinations, predominant

tactic combinations are easily identified. Kim used the tactic combination categories of redirection/environment modification, redirection/conversation, and demonstration/instruction more than other combinations (see Table 5). Janet used a greater variety of combination than the other teachers. Tactic combinations most frequently used were redirection/instruction, redirection/environment modification, redirection/conversation, instruction/conversation, and conversation/environment modification (see Table 6). Sue seemed to use the least variety of combinations. Maintenance/environment modification and maintenance/demonstration seemed the most frequently combined intervention tactics (see Table 7). Together the three teacher's combinations most frequently used were redirection/environment modification, redirection/instruction, redirection/conversation, demonstration/instruction, and environment modification/maintenance (see Table 8). The observation of tactics being combined in groups of three or more was only observed in a limited number of episodes (three). Rather than a combination of tactics greater than two, the teachers seemed to use the tactics throughout the play period to achieve the objective. For example, demonstration, redirection, and conversation were all used during a play period to get a child to interact with peers.

Consequences

The consequences of intervention tactics were difficult to observe or categorize because of the nature of the data collection. Since the teacher was the focus of the recording, some play consequences were not recorded. If the teacher immediately left the context after the intervention, the play consequence would not be seen

on the video tape. Those consequences were categorized as undetermined. Consequences which could be observed were identified as either changing play or not changing play.

Changing play was viewed as a modification in the play brought about by the teacher. The children changed their play by becoming involved, using the correct procedure, or stopping and redirecting inappropriate behavior. Non changing play behavior was defined as continuing with the same behavior. All of the teachers elicited more observed play change consequences than observed no play change consequences, although to varying degrees. 85% of Janet's interventions resulted in play change responses. Kim had 76% play change consequences and Sue had 60%.

Weberian Influences

While each episode is comprised of antecedent, intervention, and consequence, these segments are not separate from each other. As in a sentence, the parts of speech are unique but only when they are used together are they considered a sentence and an expression of thought. Similarly, the segments were viewed as a whole "sentence" or episode. In looking at which interventions were used with which antecedents, the four anteredents are listed with all of the intervention strategies used during the observation period (see Table 9).

Breech of discipline, social isolation, and child request, along with their subsequent interventions, were viewed as interactive teaching rather than preactive teaching episodes. These episodes were also examples of the Weberian influences: cultural, social-political, and economic. Breech of discipline was viewed as social-political because disputes over discipline such as harm to self, and violation of rules were interpreted by how the teacher maintained organization,

routines, and authority. Social isolation was viewed as a cultural influence since it encouraged the attitudes, beliefs, and values of the peer group and the importance of getting along with those peers. Child request was viewed as an economic influence since the child asked for resources such as help, conversation, reinforcement, or physical contact and these were perceived as scarce goods. The economic influence is comprised of those situations which are focussed on the scarcity of a product. In these situations, the product was teacher interaction. The one antecedent and its intervention tactics which were not identified as falling under one of the Weberian constructs was reactive observation. These situations were more indicative of the teachers' beliefs about teaching and learning than the other categories. Structurally, this category focussed on the teacher's observation of the ongoing play and their actions based upon the observations.

Teacher Beliefs

The interview concerning the teacher's rationales for intervention provided insight into the teachers' beliefs about their students and their classrooms. The rationales and beliefs will be discussed in relation to the Weberian issues presented earlier: cultural influences, social-political influences, and economic influences.

ultural Influences.

Individual Child. The teachers' reasons for intervening were frequently focused on the individual child. Specific child related interventions were designed to enhance development through language, social, or cultural values. The teacher facilitated language and

social development by promoting necessary skills for continued development while cultural development was encouraged through promoting attitudes, beliefs, and values. Facilitation was accomplished by removing difficulties or obstacles and aiding or assisting in opportunities to promote the children's language, social, and/or cultural development.

In looking at the teachers' principles of practice, specific strategies are evident such as the desire to carry on a conversation rather than constantly questioning the students and to stimulate the children's curiosity through word games. Although the teachers did not mention an explicit language curriculum, the fact that this explanation came up several times during the interviews suggested that there was an implicit language curriculum.

> Kim: She is one who's not very verbal. She rarely speaks and when she does, she speaks very softly. She won't speak in a a group generally. I think with her she feels a little bit intimidated by the other kids. This seems to be a good opportunity, because all the other kids were busy and so I could just sit down with her and talk with her about what was going on. Later on, I asked her what she did on her weekend, if she stayed home, if she went to Chicago, that sort of thing, just to constantly talk to her and get her to respond if she will.

Another area of intervention was related to prosocial behavior. The teachers had personal guidelines for what was considered appropriate and inappropriate social behavior. When talking about children's social development, typifications were made and interventions were based upon the teacher's characterizations of a particular child: shy, lonely, or a loner. The social isolation of a child was viewed as a risk factor and became a reason for interventing. Cooperative play was valued most with unoccupied and solitary play being valued the least. The teacher's knowledge about a

particular child's social development determined the extent of intervention whether the behavior was allowed, or redirected. Thus, typifications based upon social behaviors were reasons for intervention.

The third category under interventions for the individual child was facilitation of cultural needs. While none of the teachers specifically identified interventions based upon "cultural" facilitation, or teaching the values and beliefs of the society, this category was inferred from the observations using the framework provided by the "hidden curriculum" literature (e.g., Giroux and Penna, 1983). Cultural requirements which were given as responses for intervention were independence, freedom, curiosity, initiative, individual choice, and helpfulness. These were all reinforced in the children's play by intervention which encouraged these attributes.

The teachers' interview reflected not so much the teacher's thoughts concerning technical intervention strategy but their thoughts about goals, such as what to do for the individual children, their needs, and their characteristics.

Home Influence. The children's home and family background was another cultural factor which affected the teachers' explanations of intervention. For example, decisions were based upon particular incidences which the teacher knew had happened at home. In Janet's class, a student had not had breakfast because her sister had been taken to the hospital. Janet prepared breakfast for Sarah and allowed her to eat during free play. This is an example of the teacher knowing about a home event and interrupting a child's play to attend to a problem.

Parental pressure was also identified as affecting the

curriculum. An example of this pressure was teaching children to write their name. Kim and Sue noted that they worked with particular children who couldn't write their names and whose parents were worried. This was the only example noted of parental pressure for specific instruction influencing the curriculum that was noted.

The final home influence identified related to the tension of leaving home daily and coming to school noted by Kim and Janet. The teachers saw their rooms and themselves as providing comfort and security to ease the tension. Both teachers scheduled a greeting period for each individual child at the beginning of school for the purposes of transition.

The teachers' explanations concerning the home were not as numerous as their thoughts concerning the "individual child." However, a strong belief noted in the interviews was that the teacher served as a buffer between home and school. This belief was strong enough to effect scheduling, routine, and curriculum.

Social-Political Influences

The second Weberian construct for analyzing teachers' play interventions was the social-political influence. Through this construct, the explanations of intervention were interpreted in terms of how the teacher organized the classroom, established routines and curriculum, and maintained authority.

Teacher Role. The teachers' perceptions of their roles was reflected in their statements about what they do in the classroom. Underlying these statements were educational principles which directed the teachers' thoughts and interventions concerning their relationship to (1) early childhood curriculum, (2) how teachers should teach, and

(3) how children learn. These teachers in turn seemed to define the teachers' roles in terms of what was real or important in their classrooms.

Kim's principles may be outlined as such

The early childhood curriculum

1. Teachers should elicit verbal descriptions related to activities.

2. Teachers should elicit independent behaviors related to activities.

3. Teachers should provide activities the children enjoy.

How teachers should teach

1. Teachers should use demonstration as a teaching technique with young children.

2. Teachers should behave in a nurturing manner with young children.

3. Teachers should emphasize correct procedure in activities.

How children learn

1. Play situations provide opportunities for learning.

2. Hands on experiences in the classroom provide opportunities for learning.

3. Children learn best when they participate in an activity.

4. Children learn best when they are able to make a choice.

Janet's principles may be outlines as such

Early childhood curriculum

1. Teachers should elicit verbal descriptions related to activities.

2. Play serves as the basis for science learning in the early childhood classroom.

3. Books should be read to individual children as well as the group.

4. Teachers should provide opportunities for creative

movement (dance) activities.

How teachers should teach

1. Teachers should participate in young children's activities.

2. Teachers should behave in a nurturing manner with young children.

How children learn

1. Play situations provide opportunities for learning.

2. Children learn best when they participate in an activity.

3. Varied sensory experiences are the basis for learning.

4. Children should not be presured into learning.

Sue's principles may be outlined as such

Early childhood curriculum

1. Teachers should provide activities the children enjoy.

2. Teachers should elicit independent behaviors related to activities.

How teachers should teach

1. Teachers should emphasize correct procedure in activities.

2. Teachers should vary planned activities when children's interests vary.

How children learn

1. Children learn best when they explore on their own.

2. Children learn best when they solve their own problems.

3. Children learn best when they participate in an activity.

4. Children learn best when they are not forced to participate.

Conflict of Rules. During the play process, conflicts occurred over limited resources, use of materials, and peer conflict which became reasons to intervene in children's play. During the interviews, teachers talked about these situations and gave their

explanations for intervention.

A conflict over limited resources occured in situations involving space limitation. For example, only a certain number of children could sit at a table or play at a center at one time.

Time presented itself as a possible limited resource. For example, Sue kept a strict time schedule. Telling the children it was time to start putting away their toys resulted in several maintenance interventions. There were five interventions requiring the children to stop playing and put away their toys. However, in the fifth intervention, the teacher began picking up the toys.

The teacher's belief that children should not be hurried or pushed into stopping play seemed to conflict with her use of time maintenance interventions. While both beliefs were apparently important, they were in conflict, Sue's response to the conflict was to put the toys away herself.

The second source of conflict over rules concerned materials. The misuse or abuse of materials was given as a reason for intervention and conflict in the peer group was a third source. Strategies which the teacher used to resolve these conflicts included instruction and redirection. The children were told what they were doing wrong and/or either encouraged to go someplace else or try again.

In looking at social-political explanations of interventions, one characteristic which was noted was that of housekeeping interruptions. These day-to-day problems which occur during play emerged as a reason for intervention and were classified as maintenance.This explanation was given only by Sue. Materials, time, and expedience were all factors in the maintenance rational.

Sue also gave the explanation that it was "just easier " to intervene. Classroom activities flowed along smoother if she did them herself such as hanging up fallen paint shirts and getting materials out for the children. Even directions were given in a maintenance context such as "this goes here and that goes there." Yet, Sue's belief about what her role was to be during free play intervention provide yet another view for her rationale in intervening the way she does. Because her belief was that she should not intervene directly into the children's play, the predominance of maintenance interventions, keeping the flow smooth, did seem to be in agreement with her beliefs about the teacher role.

Learning and the Curriculum. Kim and Janet mentioned both practical skills and learning dispositions as reasons to intervene due to the curriculum. As for practical skills, the teacher intervened to reaffirm objectives, to instruct, to extend a lesson, and to evaluate. Janet intervened with combined conversation and instruction strategies to reaffirm objectives.

Learning disposition was another social-organizational influence that the teachers mentioned. Learning disposition was different than practical skill because it was concerned with an overall image or attitude toward learning that the teachers wanted to convey to their students. For example, Janet mentioned the importance of encouraging exploration which she thought was the basis for problem solving. Kim saw the use of everyday experiences and the use of manipulatives as an important aspect of her curriculum and as a reason to intervene.

While the most frequently mentioned reason to intervene concerned the individual child, learning also had a considerable impact upon the classroom activities. The teachers wanted their students to learn

specific concepts or attitudes and the curriculum was designed to meet that purpose. The influence of learning beliefs in Kim and Janet's explanations for intervention were more readily noted than Sue's reasons. Sue did not make statements about learning as frequently or as elaborately as the other teachers.

Economic Influence

The third Weberian construct used to analyze teachers' interventions during children's play was the economic influence. Through this construct, the interventions were interpreted by the scarcity of goods within the classroom, particularly the supply of materials and the teacher's attention (time). The economic influences were not mentioned by the teachers as often during the interviews as were the cultural and social-political influences. The means for drawing this influence from the data was to go back to the episode structure and look at those categories which were considered economic: limited resources and the child initiated antecedents.

Limited resources was a catagory of explanations in the social-political influence. It is the center of focus here because time space, and materials were perceived as in demand. However, the teachers' explanations of those events did not identify those situations as economic but as social-politial. The teachers explained the demand for the resources not as a lack of adequate supply but as a conflict of rules. According to Janet, if the child demanded a particular material or activity that could not be supplied, they were not directly denied but rather redirected to a new activity until the activity or material became available. The schools had ample play materials and the issue appears to be that of a conflict in

established rules of how much to provide at one time and under what conditions one is allowed to play.

In the structure section, the antecedent of the child request was structurally described as an economic influence; however, the teachers explanations of those events focussed on different influences. It is the teachers' knowledge of the child which determines the influence as cultural. What appears structurally to be an economic concern of seeking out the teacher's attention for help, conversation, reinforcement, or physical contact, became a cultural influence of enhancing the language, social, or cultural development. While a situation structurally can be identified as a demand for the teacher, an economic influence, the teacher's knowledge of the child gives it new meaning, one of a cultural influence. The teacher is concerned about the child's social development and physical health.

The child initiated antecedents in Sue's classroom were different in one aspect than those in Kim and Janet's classroom. In Sue's classroom, the children did not approach her for conversation or physical contact, rather their approach was related to a need for materials. Since Sue did not have certain materials available before free play began, preferring to distribute them after the children began playing, Sue took the role of "provider" during the play period. If the children were not occupied, then Sue would get out more materials. In this situation, Sue acknowledges a scarcity of materials and her role in providing it for the children.

While the economic influence can be identified, it is not part of the manifest curriculum. Rather, it seems to be a part of a hidden curriculum. The teachers do not specifically mention scarcity as a problem and those incidences which are structurally identified as

economic are generally given different meanings by the teachers.

Summary

The structure of the intervention episode was analyzed according to antecedent, intervention, and consequence. The teacher's reasons for intervention was not part of the structural analysis, rather the observed intervention of tape was the means of analysis. Categories were made of the components of the intervention episode. It became apparent that the relationships were too complex to understand without the teacher's rationales concerning what was going on and why they intervened. The intervention episodes were further considered as indicating Weberian influences.

SUMMARY AND CONCLUSIONS

This study focused on teacher interventions in children's play. A relationship appeared to exist between the intervention tactics used by the teachers and their statements about play. The comments about their role were consistent with the tactics used to change play. Kim and Janet made statements about play suggesting its importance in experimenting or trying new things. For example, Janet had arranged a cooking activity for the children. A table was prepared with ingredients and recipe cards for making pretzels. An oven was sitting on the floor along the wall close to the table. Two boys began to put on paint smocks for painting. One boy saw the oven and said that it looked like a "tiny micro wave". Janet agreed and told him that he could open the oven and look inside. The second boy came over and began looking, too. Janet told the boys that they could take the oven rack out and look because the oven was not hot. As the boys looked at the oven, Janet told them what they were going to cook and that they

would need an oven to make the pretzels. The boys experimented with the oven then went to the easel to paint. After they finished with the paints, both boys participated in the cooking activity.

Janet's comments about the situation were

> ...we've never had a toaster oven in the room. It's something new to the children and they discovered it by seeing it over there. So I encouraged them to go look at it because it wasn't turned on. I encouraged them to check it out, opening the doors, seeing what's in it, and then explaining to them that when it's hot they cannot do that. Part of it is that they're not sure if they can go to that activity because there are teacher things in the room and there are kid's things and something new like the oven, they're not sure if it's a teacher toy or a kid toy. So they are waiting for my encouragement to say it's okay.

Janet used environment modification, adding the oven to the cooking activity; and she also used instruction, by telling the boys about the proper use of the oven, its different parts, and its purpose in the classroom. Janet's beliefs from this episode were identified as (1) "play situations provide opportunities for learning", and (2) "play serves as a basis for science learning in the early childhood classroom".

Sue believed it was important to "let the children explore on their own". When Sue intervened, it was not to modify the ongoing play, but, to keep the play moving and the children occupied. For example, Four boys and a girl were playing at the house center. The children were pretending to eat and were serving each other food. Sue sat at a table close to the house center cutting out construction paper feathers. The children left the house center and went to the paint room. Sue followed and asked them if they would like to draw. The tactic used in this situation was predominantly maintenance. Sue's comments concerning the situation were

> I just want them to do what they want. But I sat in there just to be near them in case anything erupted, you know, like a fight started or something....I think they were waiting for me to give them something, so I thought, "Well, we'll put out the paper and pencils, "really I didn't have anything planned. I didn't want to have anything planned; I just wanted them to do whatever.

Sue used maintenance, providing materials when asked. Sue's belief identified from this episode was "children learn best when they explore on their own". Other beliefs of Kim, Janet, and Sue were identified in the results.

This study looked at the consequences of intervention, whether play changed or not. From the study, speculation arises as to what factors caused the play change. For example, Sue's intent was not to change play but, she apparently did (60% of the time). Kim and Janet intended to change play and they changed play to a greater extent than Sue (76% and 85% respectively). Intent could be a factor related to change in play. In addition, teachers' tactic patterns differed. Future research could look at the patterns and relationships between tactics, tactic combinations, and consequences where intent is held constant. A third possible factor in influencing change could be the role that teacher's personality plays in the intervention and consequences. All three teachers observed had differing personalities and it is possible that their personalities affected the interventions.

Each of the three teachers articulated an ideology or belief system concerning teaching, children's learning, and the early childhood curriculum. None of the teachers could be labeled a pure romantic or progressive, However, their overall behaviors and beliefs were mainly oriented toward a specific ideology. Sue's ideology could be labeled predominantly romantic while Kim and Janet's ideology was

predominantly progressive. For example, Janet used instruction and environmental modification to support children's experimenting and trying new things in play. One of her beliefs stated was "play provides opportunities in learning, particularly science". Kim used demonstration and environmental modification to support children's experimenting and trying new things. One of her stated beliefs was that "teachers should use the demonstration technique with young children". Sue used maintenance to sustain play. One of her beliefs was that "children should explore on their own". In these situations, the teachers' interventions and their stated belief were consistent.

The cultural influence findings from this study are similar to influences found in past research. King (1978) using a Weberian model to interpret data from British Infant Schools, noted that teachers' ideologies about teaching and learning were most prominent in the teachers' thoughts concerning play. The teachers' beliefs were identified from their descriptions of what was real in the classroom. The key element or means of identifying the beliefs and definitions of reality was based upon the teachers' decision making. The decision making fell into one of three broad categories: (1) child centered decisions rooted in individualism and developmentalism; (2) class centered decisions were rooted in beliefs about curriculum, the classroom environment, and the class as a group of children; and (3) school centered decisions rooted in beliefs about the schools' social and economic position within the society.

The present study looked at teachers' thoughts concerning play in greater detail than did the King (1978) study. In the present study, the "individual child" and the home background were two categories

under the cultural influence. From the interventions based upon the individual child or individualism, three subcategories existed for the purpose of strengthening development. These developmental areas which the teachers tried to facilitate were the child's language development, social development, and cultural values. These same developmental areas were found in the King (1978) study. King's teachers were concerned with specific content areas of reading and writing which prompted decisions based upon language devlopment, both child and class centered. The child's social development was found in the teachers' child centered and class centered beliefs on the importance of "getting along" with peers. Cultural values were represented in the class centered decisions based upon the difference between work and play and the school centered decisions based upon social and economic differences between children, teachers, and schools.

While King found prominent ideologies in the teacher's statements about play, he did not investigate educational play as a curriculum area the way he investigated reading and writing. The teachers' beliefs focussed on the differences between work and play. As a result, the findings did not illuminate the teacher's role in play or their beliefs on what was important play strategy for teacher and student as the present study did. The present study did not find a work-play stratification. Students in the British Infant School are between the ages of five and seven while the preschoolers in the present study were between the ages of three and four. The work-play phenomena noted by King can be viewed as a transition function for somewhat older children in British Infant Schools preparing children for later schooling.

The second cultural influence was that of the home. The King study also saw the home as influencing decision making. However, King's teachers based their decisions predominantly on socio-economic factors which seemed to overlap this catagory with school centeredness, decisions based upon economic influence. The teachers in the King study believed children to be innocent and not fully responsible for what they did. This belief created a counter balancing belief which stated that if the children behaved in a manner inconsistent with the "innocent child" belief, then it was the home's fault. The "innocent child" belief was not found in the present study, but a belief did exist concerning the home.

The teachers in this study primarily believed that home and school should work together. They saw their roles as easing the transition between home and school for the children. Socio-economic statements were not made about the children's family nor the teacher's relationship to the children. This is possibly due to the homogeneous sample of this study. Both the teachers and the children in all three classrooms came from middle class backgrounds. The cultural influence findings of this study support the King (1978) findings. Both studies used a Wherian model for data analysis and both found that teachers of young children base their decisions on individual children, their individualism, and proper development.

The social-political findings of this study are consistent with those of the King (1978) study. King organized the social-political influences of his study through three areas: conflict, power, and organization. These three categories can also be identified in the findings of the present study. Conflict in the King study was also

identified in the present study and labeled conflict of rules. King's idea of power was characteristic of the teacher's role. The teachers' perception of their role in play intervention identified the teachers' beliefs about their importance of play and their authority to intervene. The teacher's belief about their role in play was considered the influence of power because it deals with the role of dominance and subservience in a social situation. Sue's housekeeping interventions were characteristic of the organization influence in the King study.

One category of explanations regarding the decision to intervene was based on the teachers' comments concerning children learning and teachers teaching. This aspect of teachers' decision making was also noted by King. King's teachers discussed this phenomena in the context of reading writing, arithmetic, and nature studies. Play was considered a form of learning; however, the teachers' comments about play as a curriculum area consisted of defining it in relationship to work and other scheduled learning events of the day, manifest learning. In the present study, the comments about teaching during play are specific and focussed on all aspects of the teaching process. It was through this category that one could see a glimpse of all the other major categories and for this reason it was problematic to view in a pure form. Unlike the "learning" explanations concerning the fostering of language, social skills, and cultural values, these learning explanations had to do more with the teacher as focal point rather than the student. The teacher teaching and the student learning were discussed together. For these reasons, Elbaz's (1981) interpretation of teachers' decision making seems particularly appropriate since these categories see teaching explanations on a

three dimensional level: rules of practice, practical principles, and images. In the present study, the teaching explanations fell into one of two categories, practical skills (principles) and learning disposition (images). The practical skills are similar to the Elbaz' practical principles because they look at the teachers' general constructs of the experience and philosophy of teaching, such as reaffirming objectives, instruction principles, lesson extensions, and evaluation. Learning disposition was similar to Elbaz' images because it was concerned with the overall images or attitude of teaching and learning. For example, the teachers were interested in encouraging exploration and the intensity of play. Elbaz studied a high school teacher while the three teachers in this study were preschool teachers. It appears that these teachers think in a similar manner despite the fact that they teach at different levels. The social-political influence findings of this study are supported by the King (1978) study and the teachers' explanations of specific teaching interventions (principles and dispositions) are supported by the Elbaz (1981) study.

A disequilibrium appeared to exist in the economic influence between observed economic influences and the teachers' differing explanations regarding those influences. For example, Kim and Janet's beliefs about learning and the curriculum related to the importance of the children being free to explore, experiment, and to become involved with the teacher enriching the activity through their involvement. Admitting a scarcity of goods would put those beliefs in jeapordy. Another consideration is the self-fulfilling prophecy which stipulates that a false construct believed to be true

in fact becomes reality. In this case, the teachers defined the reality which occured in their classrooms during free play. Whether the economic influence existed in Kim and Janet's classroom or not, those teachers did not define it as a reality. Sue's beliefs about her role in the children's learning was focussed on the children playing and solving their own problems without teacher intervention. Sue's primary intervention tactic was maintenance; she was a "provider". Sue's acknowledgement of scarcity of resources did not seem to put her classroom on the same level of disequilibrium as the others.

The focus of this study was the teachers' actions as well as their reasons for intervention. This was accomplished by video filming teachers' intervention in children's play and then interviewing the teachers later the same day concerning their interventions. The video helped to provide a means for stimulating the teachers' recall by letting the teacher watch the event and describe elements of importance. The understanding about teachers' beliefs this design was able to abstract supports past research studies which used like methods for looking at teachers' thoughts (e.g. Elbaz, 1981; Marland, 1977; Connors, 1978; Gaier, 1954). Limiting researcher bias was viewed as an advantage of this method because by using the researcher's descriptions of the events, the description could bias the teachers' comments. Another advantage to this procedure was the ability to go back to the actual event as many times as needed, an advantage which is lost with other procedures. While the design of this study and the constructs used to identify themes are different, the findings are consistent with earlier studies of teacher beliefs and cognitive thought processes (e.g., King, 1978;

Marland, 1977; Connors, 1978; King, 1978; Elbaz, 1981; Spodek & Rucinski, 1985).

In past studies, play has been studied in clinical settings and in settings outside the classroom (e.g., Freyberg, 1973; Lovinger, 1974; Rubin, 1977; Dansky, 1980) with play themes predominantly being those of social and cognitive levels (e.g., Parten, 1932; Rubin, 1977; Rubin, Maioni, & Hornung, 1976). A significant component of the early childhood curriculum is play and only a few studies have looked at play in educational settings (e.g., Sylva, Roy, & Painter, 1980; Spodek & Rucinski, 1985).

This study looks at educational play in an education setting and at the perspective of the teachers' input. The teachers' input into children's play has generally been assumed. Teachers' actions, reasons, beliefs, and principles about play and learning in their classrooms were studied to enhance the field's knowledge about what happens in preschool play. Relevant knowledge must not focus only on the child in isolation but look at the educational process in context of the community, family, and peers. The methods to examine these questions and issues come from ethnographic field research reconstructing the meaning of the social system. Thus the knowledge base for this line of inquiry must rely on the work of practitioners. The teacher's thoughts, beliefs, and decision making are all valuable sources for insight into the educational process. The practice of looking at teacher decision making goes beyond the past labeling of teacher ideologies. While none of the teachers in this study could be classified as traditional, all three teachers stated strong beliefs which could be considered both romantic and progressive. Yet, all

three teachers were different in belief statements concerning what was real in their classroom. Elbaz (1981) stated that research frequently looked at teachers in a negative way by viewing them as just a common factor in the education system. By looking at beliefs and decision making the teacher becomes a valuable source, more than just a common factor.

REFERENCES

Connors, R. D. (1978). An analysis of teacher thought processes, beliefs, and principles during instruction. Unpublished doctoral dissertation, University of Alberta.

Dansky, J. L. (1980). Cognitive consequences of sociodramatic play and exploration training for economically disadvantaged preschoolers. Journal of Child Psychology and Psychiatry, 21, 47-58.

Elbaz, F. (1981). The teacher's "practical knowledge": Report of a case study. Curriculum Inquiry 11, 43-71.

Feitleson, D., & Ross, G. S. (1973). The neglected factor play. Human Development, 16, 202-223.

Freyberg, J. T. (1973). Increasing the imaginative play of urban disadvantaged kindergarten children through systematic training. In J.L. Singer (Ed.), The child's world of make-believe. New York: Academic Press.

Gaier, E. L. (1954). Memory under conditions of stimulated recall. Journal of General Psychology, 50, 147-153.

Giroux, H., & Penna, A. (1983). Social education in the classroom. The dynamics of the hidden curriculum. In H. Giroux and D. Purpel (Eds.), The hidden curriculum and moral education (pp. 100-121). Berkley, CA: McCutchan Publishing Corporation.

King, R. (1978). All things bright and beautiful? New York: Wiley.

Lovinger, S. (1974). Sociodramatic play and language development in preschool disadvantaged children. Psychology in Schools, 11, 313-320.

Marland, P.W. (1977). A study of teachers' interactive thoughts. Unpublished doctoral dissertation, University of Alberta.

Parten, M. B. (1932). Social participation among preschool children. Journal of Abnormal and Social Psychology, 27, 243-269.

Rosen, C. E. (1974). The effects of sociodramatic play on problem solving behavior among culturally disadvantaged preschool children. Child Development, 45, 920-927.

Rubin, K. H. (1977). Play behaviors of young children. Young Children, 32(6), 16-24.

Rubin, K. H., Maioni, T. L., & Hornung, M. (1976). Free play behaviors in middle-and-lower-class preschoolers: Parten and Piaget revisited. Child Development, 47,414-419.

Saltz, E., Dixon, D., & Johnson, J. (1977). Training disadvantaged preschoolers on various fantasy activities: Effects on cognitive functioning and impulse control. Child Development, 48, 367-380.

Smilansky, Sara. (1968). The effects of sociodramatic play on disadvantaged preschool children. New York: John Wiley.

Smith, P. K., & Syddall, S. (1978). Play and non-play tutoring in preschool children: Is it play or tutoring which matters? British Journal of Educational Psychology, 48, 315-325.

Spidell, R.A. (1985). Preschool Teachers' Intervention in children's play. Unpublished doctoral dissertation, University of Illinois at Urbana-Champaign.

Spodek, B. & Rucinski, E. (1985). A study of early childhood teachers' beliefs: Preschool teachers. Paper presented at the annual meeting of the American Educational Research Association, Chicago.

Sylva, K., Roy, C., & Painter, M. (1980). Childwatching at playgroup and nursery school. London: Grant McIntyre.

Tizard, B., Philps, J., & Plewis, I. (1976). Play in preschool centers: Play measures and their relations to age, sex, and IQ. Journal of Child Psychology and Psychiatry, 17, 251-264.

Weber, M. (1947). Max Weber: The theory of social and economic organization(A.M. Henderson & T. Parsons, Trans.) New York: Free Press. (Original work published 1922)

Table 1

Single Interventions for Kim

Interventions	Frequency	Percentage
Demonstration	13	27.6
Conversation	10	21.3
Redirection	8	17.0
Instruction	5	10.6
Environment Modification	4	8.5
Participation	4	8.5
Praise	2	4.2
Maintenance	1	2.1
Total	47	

Table 2

Single Interventions for Janet

Interventions	Frequency	Percentage
Instruction	16	25.4
Redirection	14	22.2
Conversation	9	14.3
Environment Modification	9	14.3
Participation	8	12.7
Demonstration	4	6.3
Praise	2	3.2
Maintenance	1	1.6
Total	63	

Table 3

Single Interventions for Sue

Intervention	Frequency	Percentage
Maintenance	15	32.6
Environment Modification	9	19.6
Redirection	7	15.2
Instruction	6	13.0
Conversation	4	8.6
Demonstration	3	6.5
Praise	2	4.3
Participation	0	0.0
Total	46	

Table 4

Interventions Used By All Three Teachers

Interventions	Frequency	Percentage
Redirection	29	18.6
Instruction	27	17.3
Conversation	23	14.7
Environment Modification	22	14.1
Demonstration	20	12.8
Maintenance	17	10.9
Participation	12	7.7
Praise	6	3.8
Total	156	

Table 5

Intervention Combination Tactics for Kim

	Praise	Participation	Maintenance	Environment Modification	Instruction	Demonstration	Conversation
Redirection	0	0	0	4	0	1	3
Conversation	0	1	1	0	1	0	
Demonstration	0	0	1	0	4		
Instruction	1	0	0	0			
Environment Modification	0	0	1				
Maintenance	0	0					
Participation	0						

Table 6

Intervention Combination Tactics for Janet

	Praise	Participation	Maintenance	Environment Modification	Instruction	Demonstration	Conversation
Redirection	1	0	1	4	6	0	2
Conversation	0	1	0	2	2	0	
Demonstration	0	0	0	0	1		
Instruction	0	1	1	0			
Environment Modification	0	1	0				
Maintenance	0	0					
Participation	0						

Table 7

Intervention Combination Tactics for Sue

	Praise	Participation	Maintenance	Environment Modification	Instruction	Demonstration	Conversation
Redirection	0	0	1	1	0	0	0
Conversation	0	0	0	0	0	0	
Demonstration	0	0	2	0	0		
Instruction	0	0	1	0			
Environment Modification	0	0	4				
Maintenance	0	0					
Participation	0						

Table 8

Intervention Combination Tactics for All Three Teachers

	Praise	Participation	Maintenance	Environment Modification	Instruction	Demonstration	Conversation
Redirection	1	0	2	9	6	1	5
Conversation	0	2	1	2	3	0	
Demonstration	0	0	3	0	5		
Instruction	1	1	2	0			
Environment Modification	0	1	5				
Maintenance	0	0					
Participation	0						

Table 9

Intervention Episodes

Antecedent	Intervention Tactic	Influence
Breech of Discipline	instruction conversation redirection demonstration environment modification	Social Political
Social Isolation	instruction conversation redirection praise participation demonstration	Cultural
Requesting Child	conversation instruction maintenance praise participation demonstration environment modification	Economic
Reactive Observation	instruction conversation maintenance praise redirection participation demonstration environment modification	

ABSTRACT

The purpose of this study was to describe preschool teachers' intervention during children's free play. A Weberian sociological framework was used to examine (1) what happens when teachers intervene into children's play, (2) teachers' beliefs and thus their decisions about play, and (3) the relationship between these issues. Three preschool, teachers were video filmed during free play and later interviewed about observed intervention episodes. The teachers were prompted to talk about what happened during the event, what they were thinking about, and for what reason they intervened.

The findings indicated that the intervention episode could be broken into three identifiable segments: antecedent, tactic, and consequence. The antecedents were categorized into one of four categories: breech of discipline, social isolation, child request, and reactive observation. The tactics were categorized as conversation participation, demonstration, environmental modification, praise, redirection, maintenance, and instruction. The consequences were noted as either changing play, not changing play, or undetermined.

The teachers held differing beliefs and their actions were related to their belief systems. The teachers based their decisions upon their personal system of educational principles concerning how teachers should teach, how children learn, and early childhood curriculum. The reasons for intervention fell into one of the three Weberian constructs: cultural influences, social-political influences, and economic influences.